

Proposal Reviews

#253: Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region

William Lettis & Associates, Inc.

Final Selection Panel Review

Initial Selection Panel Review

Research and Restoration Technical Panel Review

Delta Regional Review

External Scientific Review #1
#2

Environmental Compliance

Budget

Final Selection Panel Review:

CALFED Bay-Delta 2002 ERP PSP Final Selection Panel Review

Proposal Number: 253

Applicant Organization: William Lettis & Associates, Inc.

Proposal Title: Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region

Please provide an overall evaluation rating.

Fund	
As Is	X
In Part	-
With Conditions	-
Consider as Directed Action	-
Not Recommended	-

Amount: **\$120000**

Conditions, if any, of approval (if there are no conditions, please put "None"):

none

Provide a brief explanation of your rating:

The Selection Panel's initial recommendation was to "fund as is". The Delta Protection Commission commented on the application, requesting that the information and data produced in this project be made available "free" to the public. A standard condition of all CALFED ERP funding, as documented in the PSP's Attachment D, is that all data and information, such as the documents developed through this project, are public information and may not be sold.

Initial Selection Panel Review:

CALFED Bay-Delta 2002 ERP PSP Initial Selection Panel Review

Proposal Number: 253

Applicant Organization: William Lettis & Associates, Inc.

Proposal Title: Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region

Please provide an overall evaluation rating.

Explanation of Recommendation Categories: Fund

- **As Is** (a proposal recommended for funding as proposed)
- **In Part** (a proposal for which partial funding is recommended for selected project phases or components)
- **With Conditions** (a proposal for which funds are recommended if the applicant contractually agrees to meet the specified conditions)

Consider as Directed Action in Annual Workplan (a proposal addressing a high priority action that requires some revision followed by additional review prior to being recommended for funding)

Not Recommended (a proposal not currently recommended for funding-after revision may be considered in the future)

Note on "Amount":

For proposals recommended as Fund As Is, Fund In Part or Fund With Conditions, the dollar amount is the amount recommended by the Selection Panel.

For proposals recommended as Consider as Directed Action in Annual Workplan, the dollar amount is the amount requested by the applicant(s).

Fund	
As Is	X
In Part	-
With Conditions	-
Consider as Directed Action	-
Not Recommended	-

Amount: **\$120,000**

Conditions, if any, of approval (if there are no conditions, please put "None"):

none

Provide a brief explanation of your rating:

This is a geologic and geomorphic mapping project that will produce potentially very useful GIS maps for restoration and management in the delta region. These maps will be based, in part, on early photographs of delta formation, geology and sediment deposition processes. The research team should assure that they are not duplicating existing information by checking with state and federal agencies and others. The team should also coordinate their efforts with local Delta interests, including the Delta Protection Commission.

Research and Restoration Technical Panel Review:

CALFED Bay-Delta 2002 ERP PSP Research and Restoration Technical Panel Review Form

Proposal Number: 253

Applicant Organization: William Lettis & Associates, Inc.

Proposal Title: Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region

Review:

Please provide an overall evaluation summary rating:

Superior: outstanding in all respects;

Above Average: Quality proposal, medium or high regional value, and no significant administrative concerns;

Adequate: No serious deficiencies, no significant regional impediments, and no significant administrative concerns;

Not Recommended: Serious deficiencies, significant regional impediments or significant administrative concerns.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Superior	The proposal had clear goals, outlined specific tasks and deliverables and presented a reasonable time schedule and budget. We foresee that the GIS maps will be used for a variety of purposes in this region, although more effort needs to be made to involve and inform regional planning agencies.
XAbove average	
-Adequate	
-Not recommended	

1. **Goals and Justification.** Does the proposal present a clear statement of goals, objectives and hypotheses? Does the proposal present a clear justification and conceptual model for the project?

The goals were clear, and the products of this effort will address three major problems: 1) floodplain restoration and levee setback strategies, 2) levee stability and 3) distribution of mining debris. The proposal supports planning for floodplain and riparian habitats and setback levees. It also supports Delta Priority 6 by providing background on locations of contaminated sediments. Because the nature of the project is information compilation, field mapping, and interpretation of historical records rather than experimental, there are no hypotheses to test, per se. The conceptual model of how the Bay and Delta landscapes evolved during the last 7000 years is sound.

2. **Likelihood of Success (Approach, Feasibility, Capabilities and Performance Measures).** Is the project likely to succeed based on the approach, feasibility and project team capabilities? Are the proposed performance measures adequate for measuring the project's success?

The project is likely to succeed in collecting and disseminating the information.

3. **Outcomes and Products.** Will the project advance the state of scientific knowledge in general and/or make an important contribution to the state of knowledge of the Bay-Delta Watershed? For restoration proposals, is the project likely to contribute to ecosystem restoration or species recoveries in a significant way? Will the project produce products useful to decision-makers and scientists?

The products are the strong point of this proposal. The results of coordinated mapping of several useful themes across nine topographic quadrangles will be compiled into GIS map layers. Historical landforms, topographic models, distributions of soils and mining debris, and reference stratigraphic sections will be included in the data sets. These data sets will be fully accessible to CALFED and the general public. Metadata will be submitted to the California Environmental Resources Evaluation System (CERES). Reviewers requested that the applicants show how information available in the San Francisco Estuary Bay-Delta EcoAtlas relates to this project.

4. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

The budget was considered very reasonable for the amount of work that would take place.

5. **Regional Review.** How did the regional panel(s) rank the proposal (High, Medium, Low)? Did the regional panel(s) identify significant benefits (regional priorities, linkages with other activities, local involvement) or impediments (local constraints, conflicts with other activities, lack of local involvement) to this proposal? What were they?

Regional review panel ranked this as medium. They saw the proposal creating useful information, but they were not sure how quickly and easily this information would be incorporated into remedial actions.

6. **Administrative Review.** Were there significant concerns about the proposal with regard to the prior performance, environmental compliance and budget administrative reviews? What were they?

No administrative review concerns.

Miscellaneous comments:

None

Delta Regional Review:

Proposal Number: 253

Proposal Title: Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region

Overall Ranking: -Low **XMedium** -High

Provide a brief summary explanation of the committee's ranking:

Although this information would be useful, not sure how strongly supports the main priorities in the PSP in how quickly it would lead to action.

1. Is the project feasible based on local constraints?

XYes -No

How?

It is research-based. They note that limited access may need to be obtained to selected areas for field mapping.

2. Does the project pursue the restoration priorities applicable to the region as outlined in the PSP?

XYes -No

How?

Provides background that supports planning for floodplain and riparian habitats (Delta priority 1) and setback levees (Delta priority 2). Supports Delta priority 6 by providing background on locations of contaminated sediments.

3. Is the project adequately linked with other restoration activities in the region, such as ongoing implementation projects and regional planning efforts?

XYes -No

How?

No evidence of current involvement with regional planning efforts but commitment to make formal and informal presentations to CALFED and other interested states and local agencies.

4. Does the project adequately involve local people and institutions?

XYes -No

How?

? Will coordinate w/ USGS. States will continue involvement with local organizations (such as ABAG). Commitment to make formal and informal presentations to CALFED and other interested states and local agencies.

Other Comments:

Although this information would be useful, not sure how strongly supports the main priorities in the PSP in how quickly it would lead to action. Possibility that much of this information may be available in the San Francisco Estuary Bay-Delta EcoAtlas.

External Scientific: #1

Research and Restoration External Scientific Review Form

Proposal Number: **253**

Applicant Organization: **William Lettis & Associates, Inc.**

Proposal Title: **Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region**

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

None

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
X Excellent	CALFED would get several useful products at a reasonable cost if this proposal is funded.
-Good	
-Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

1) Excellent The goals of the proposal are to address three major problems: 1) floodplain restoration and levee setback strategies, 2) levee stability and 3) distribution of mining debris. The goals are clearly stated, and project objectives directly support the goals. Because the nature of the project is information compilation and interpretation of historical records rather than experimental, there are no hypotheses to test, per se, but the reasoning behind the project goals are well explained. The reasoning is based on a conceptual model of how the Bay and Delta landscapes evolved during the last 7000 years. The ideas of floodplain formation and soil development are timely and appropriate for addressing several pressing problems.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

1) Excellent Three major problem areas are addressed. Good baseline data on historical conditions, floodplain composition, and distributions of mining debris are necessary before restoration can proceed. These data will support several of the Calfed restoration priorities DR-1, DR-2, DR-4, and DR-6 (better understanding of historic data and greater knowledge of basic processes, delineating sediments that contain mercury, information supporting planning for floodplain and riparian habitats and setback levees) The sharing of data through GIS base layers compiled in a consistent manner across nine quadrangles will assist many future restoration activities.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

2) Very Good The authors lay out several tasks and subtasks, each with clear descriptions of what work will be accomplished, how the data will be collected and compiled, and a clear description of the deliverables for each subtask. Most of the work will be based on analysis of older maps, aerial photographs, and topographic maps. Field investigations will be used, but details on the approach for field work are not included. It wasn't clear what geotechnical soil information would be collected in the field and from where the samples would be collected.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

2) Very good. The approach seems feasible and should be completed in the time allotted. It may be difficult to differentiate mining sediments from conventional flood deposits, although the project will at least be able to identify deposits of different ages. The proposal calls for examination of sediment mineralogy to help distinguish the sediments, but specifics of this task are not listed.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

2) Very Good. The project is designed to be useful to the government agencies involved in planning and restoration. Presentations and workshops with interested parties will help assure that the information is fully transferable. Peer-review will also be used through the publishing of results in professional journals.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

1) Excellent The products are the strong point of this proposal. The deliverables are clearly described, and their usefulness to government agencies is clear. Metadata will be submitted to the California Environmental Resources Evaluation System (CERES), so will be available to the general public. Historical information, topographic models, distributions of soils and mining

debris, and reference stratigraphic sections will be included in the data set.

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

1) Excellent The authors are well qualified to conduct this study. Dr. Helley is respected in his field and has over 32 years of professional experience. His previous, but unpublished, mapping of the geology of this area will help this project. His contacts with USGS researchers will also help assure that the new mapping is coordinated with other regional efforts. Both Mr. Hitchcock and Dr. Sowers have published in peer-reviewed journals and have experience in the type of work proposed in this project

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

1) Excellent The costs for this project are very reasonable, and Calfed should get several useful deliverables for a small investment of money. The budget page was unclear due to a software problem (frustration over the software was expressed in many proposals, not just this one), but an additional budget justification sheet clarified the discrepancies. The amount of time budgeted for each investigator is reasonable, and the costs for supplies and services are also fair.

Miscellaneous comments:

External Scientific: #2

Research and Restoration External Scientific Review Form

Proposal Number: **253**

Applicant Organization: **William Lettis & Associates, Inc.**

Proposal Title: **Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region**

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

None

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
X Excellent	This proposal is straightforward and meets a clear need for historic reconstruction. The utility for CALFED restoration is not exactly clear.
-Good	
-Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

The overall goal is clear and simple, to provide a regionally consistent GIS data that addresses regional restoration priorities and problems, including floodplain restoration and levee setback strategies, levee stability, and distribution of mining debris. The projects objectives are explicitly designed around these goals. There is no hypothesis structure.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

A relatively straightforward conceptual model is based on the evolution of the Bay-Delta landscape over the last 7,000 years.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

The applicants approach is appropriately organized around the objectives as discrete, separate and phased tasks. Results will contribute to better incorporation into adaptive management.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

There are few risks and uncertainties in either the concept or approach to this study. Almost all of the methodologies are tried and true except perhaps accurate identification of mining sediments. The scale of the project is both manageable and consistent with the objectives.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

Performance measures are based on timely production of deliverables, internal CALFED review and external peer-review.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

Products are defined specifically as GIS map layers, technical reports and manuscripts submitted to peer-review scientific journals.

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

Investigators appear to have solid backgrounds and expertise.

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

Cost (\$123,450) is very reasonable.

Miscellaneous comments:

Environmental Compliance:

Proposal Number: 253

Applicant Organization: William Lettis & Associates, Inc.

Proposal Title: Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region

1. Are the legal or regulatory issues that affect the proposal identified adequately in the proposal?

☒Yes ☐No

If no, please explain:

2. Does the project's timeline and budget reflect adequate planning to address legal and regulatory issues that affect the proposal?

☒Yes ☐No

If no, please explain:

3. Do the legal and regulatory issues that affect the proposal significantly impair the project's feasibility?

☐Yes ☒No

If yes, please explain:

Other Comments:

Budget:

Proposal Number: 253

Applicant Organization: William Lettis & Associates, Inc.

Proposal Title: Geomorphic and Geologic Mapping for Restoration Planning, Sacramento-San Joaquin Delta Region

1. Does the proposal include a detailed budget for each year of requested support?

☒Yes ☐No

If no, please explain:

2. Does the proposal include a detailed budget for each task identified?

☒Yes ☐No

If no, please explain:

3. Does the proposal clearly state the type of expenses encompassed in indirect rates or overhead costs?

☒Yes ☐No

If no, please explain:

4. Are appropriate project management costs clearly identified?

☒Yes ☐No

If no, please explain:

5. Do the total funds requested (Form I, Question 17A) equal the combined total annual costs in the budget summary?

☐Yes ☒No

If no, please explain (for example, are costs to be reimbursed by cost share funds included in the budget summary).

Having problems with getting the program to work.

6. Does the budget justification adequately explain major expenses?

☒Yes ☐No

If no, please explain:

7. Are there other budget issues that warrant consideration?

-Yes ☒No

If yes, please explain:

Other Comments: